

深圳市艾汇科技有限公司  
ShenZhen Ai hui Technology Co. , Ltd

## Antenna Test Report

Name of supplier	ShenZhen Aihui Technology Co. , Ltd				
Customer name	Wishtel Pvt Ltd				
Sample name	D8-MTK8786-WBG				
model	D8-MTK8786-WBG				
Inspection item	Performance test	Visual inspection	Structure	In the news	Test results
Notes					
Quality Audit		Project Audit		Business confirmation	
The following is to be completed by the client					

Room 402, Building C, Juxin Technology Industrial Park, Nanchang Community, Gushu, Xixiang, Bao'an District, Shenzhen City

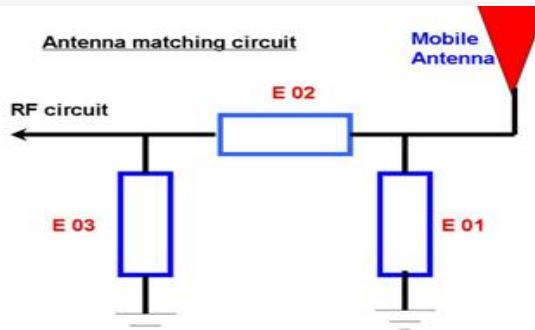
## 1. Project Image

The final verification antenna performance prototype in our company for at least one year, easy to analyze and solve the problem of antenna mass production, to ensure the quality of antenna shipment

## 2. Test Fixture

Objective: to test the passive parameters of antenna as accurately as possible. Making Method: the handset is made of a 50 ohm coaxial cable, one end of which is connected to the test point of the back end of the matching circuit of the handset motherboard (front end of the RF test hole) , and the other end is connected to the SMA joint. The diagram is as follows:

## 3. Antenna matching circuit



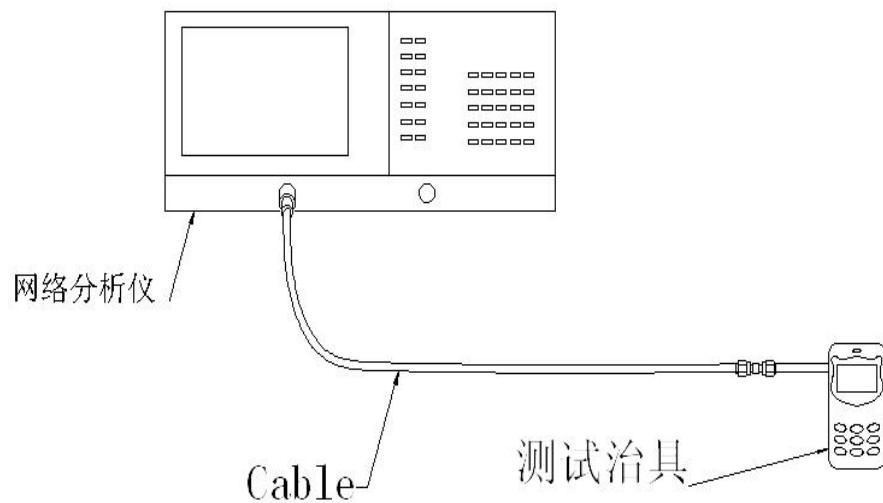
### Modify

E01	E02	E03
No	No	No

Note: The match is unmodified.

## 4. S11 test

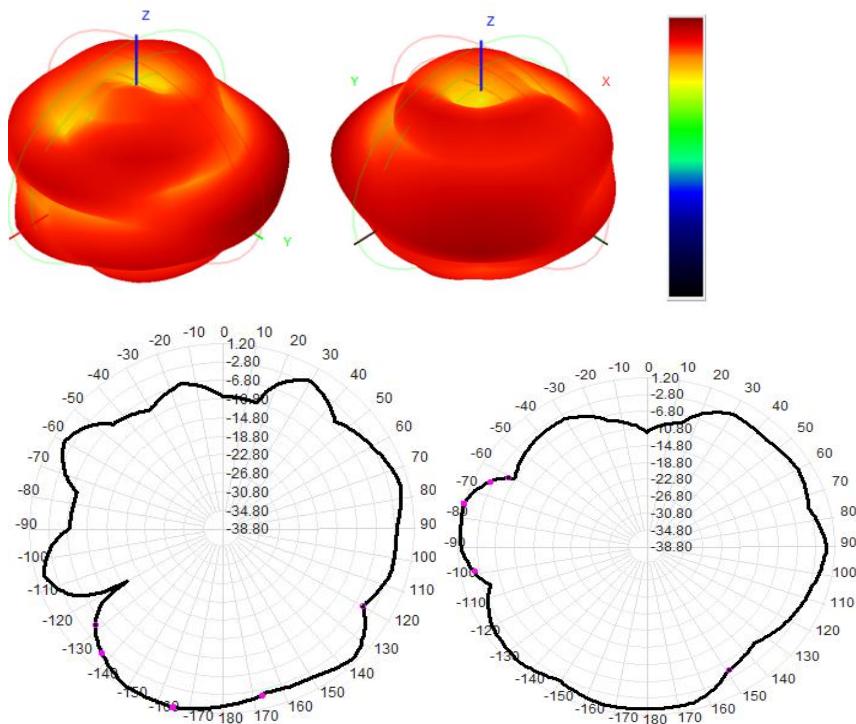
S11 test method description of test equipment: Network Analyzer (E5071C) test method: a 50 ohm CABLE is used to export from the instrument test port. The SMA connector for connecting the handset is calibrated using a calibration piece, record the echo loss and standing wave ratio corresponding to the relevant frequency points. The test schematic is as follows:



## 5. Darkroom test equipment and data

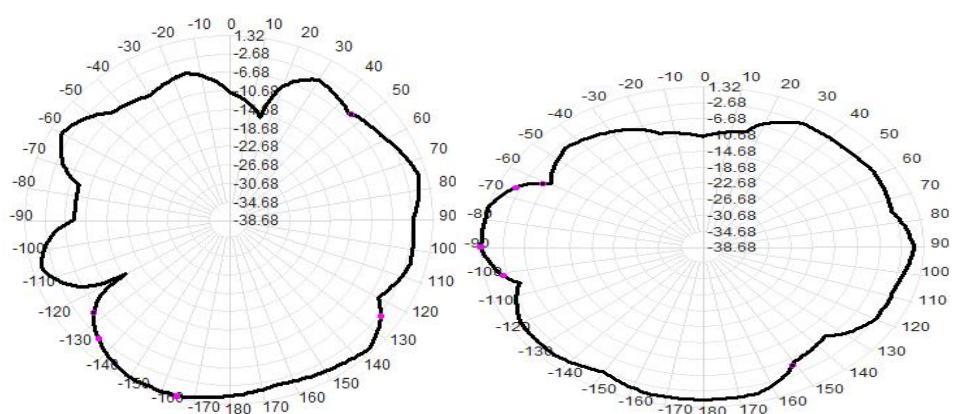
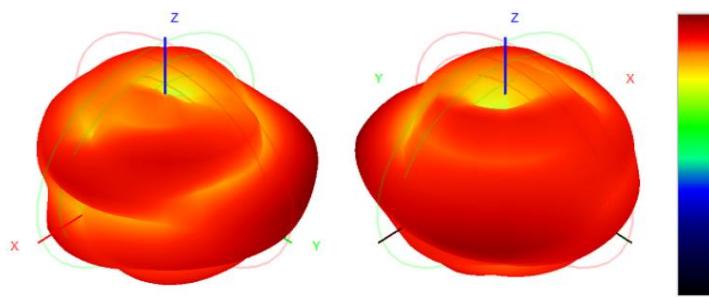
### GPS

Gain&Efficiency			
frequency (Hz)	gain (dB)	efficiency (dB)	efficiency
1565M	1.04	-2.18	45.21%
1575M	1.19	-2.05	46.39%
1585M	1.2	-2.34	46.61%
1595M	1.12	-2.36	46.85%



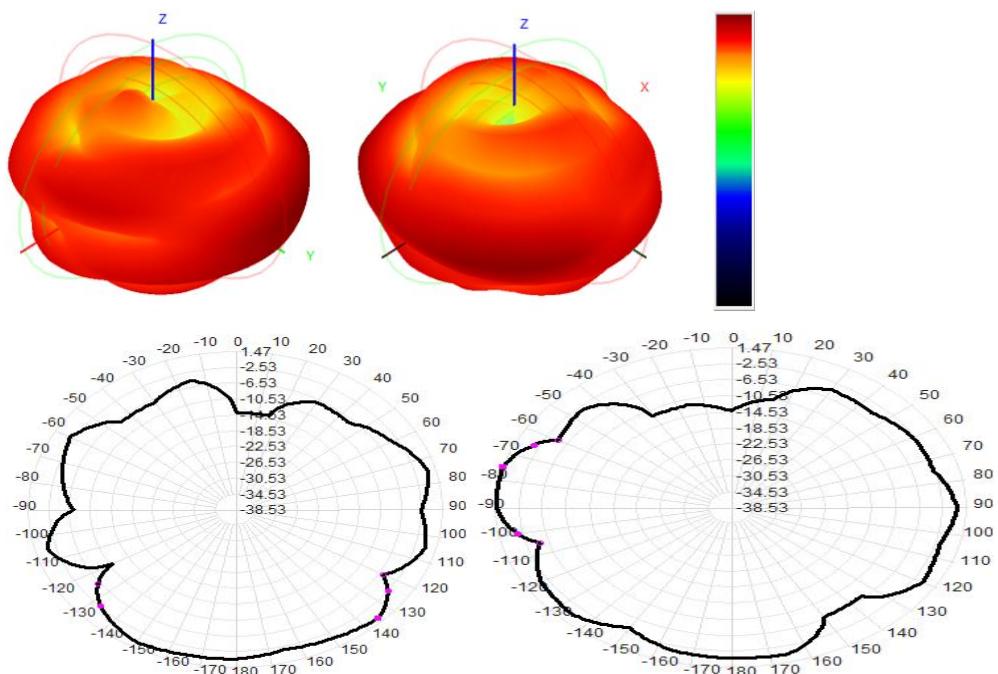
## 2.4G WIFI&Bluetooth Antenna

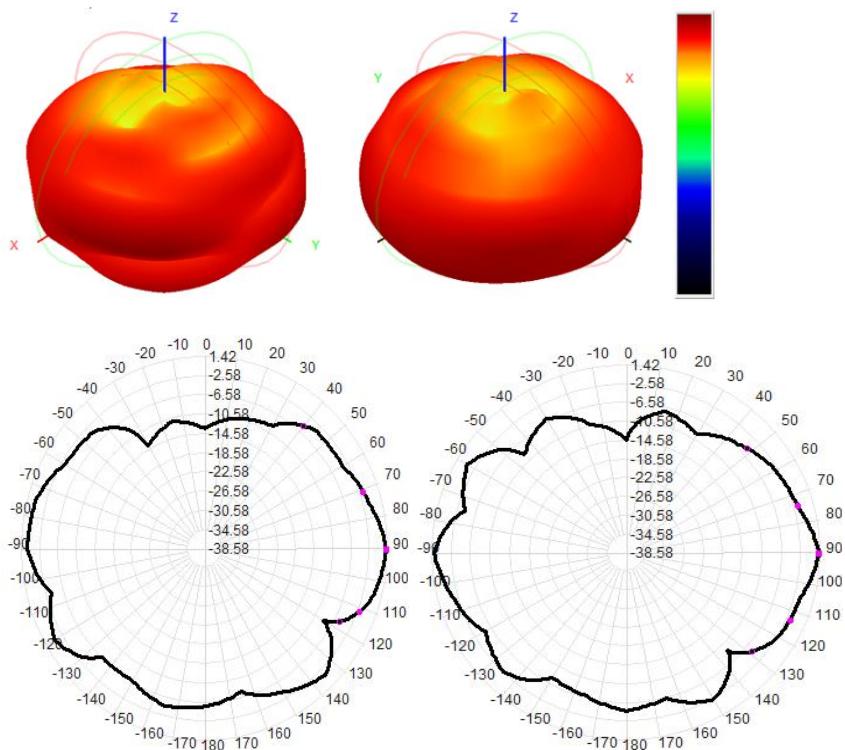
Gain&Efficiency			
frequency( Hz)	gain (dB)	efficiency (dB)	efficiency
2400M	1.32	-3.96	47.36%
2410M	0.89	-3.88	49.58%
2420M	1.03	-3.93	51.11%
2430M	1.01	-3.97	50.21%
2440M	1.21	-3.85	51.03%
2450M	1.18	-3.84	48.63%
2460M	1.15	-3.96	49.28%
2470M	0.96	-3.92	50.11%
2480M	1.09	-3.91	47.63%
2490M	1.23	-4.25	46.85%
2500M	1.02	-4.16	46.32%



## 5G WIFI Antenna

Gain&Efficiency			
frequency (Hz)	gain (dB)	efficiency (dB)	efficiency
5050M	1.18	-3.47	54.54%
5100M	1.62	-3.43	54.15%
5150M	1.44	-3.86	56.25%
5200M	1.52	-3.17	56.38%
5250M	1.51	-2.97	57.23%
5300M	1.6	-3.13	56.66%
5350M	1.63	-3.55	55.73%
5400M	1.35	-3.02	57.62%
5450M	1.47	-3.34	56.38%
5500M	1.15	-3.43	54.83%
5550M	1.58	-3.24	56.52%
5600M	1.57	-3.61	56.71%
5650M	1.37	-3.88	54.10%
5700M	1.8	-3.79	54.83%
5750M	1.19	-4.1	52.19%
5800M	1.64	-4.22	51.24%
5850M	1.15	-4.31	50.28%





## 5.2 Test Equipment

Test system: shielded darkroom

The temperature was  $22^{\circ}\text{C} \pm 3^{\circ}\text{C}$  and the humidity was  $50\% \pm 15\%$

Test equipment: when testing passive data, use the Network analyzer AGILENT E5071C to test active data, use the omnibus CMW500



## 6. Structural drawings

